

REMARKS

Reconsideration of the application in light of the amendments and the following remarks is respectfully requested.

Status of the Claims

Claims 1-21 are pending in this application. Claim 1, 2, 5, 7, 9, 11 and 12 have been amended. Claims 13-21 have been added. No new matter has been added.

Allowable Subject Matter

Applicants appreciatively acknowledge the Examiner's indication of allowable subject matter in claims 3, 4, and 8.

Rejections under 35 U.S.C. § 112

Claims 5-7 and 9-12 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Specifically, the Examiner indicates that the claims are unclear as to whether requiring one or two differences in the enumerated items. Amended claims 5, 7, 9 and 11 now recite “a difference in at least one of stereo sounds, monaural sounds, multiplex sounds, number of channels, and encoding bit rate.” Claim 12 has been similarly amended. Applicants respectfully submit that claims 5, 7, 9, 11 and 12 are now in condition for allowance

Rejections under 35 U.S.C. § 102

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,915,066 to Katayama.

Amended claim 1 recites “a video encoding unit,” “an audio encoding unit” where “the video control unit controls said audio encoding unit so that when one of an audio mode and an audio encoding condition changes, an audio output level is gradually lowered, and then thereafter said audio output level is gradually raised again.” The specification describes an “audio mode” and an “audio encoding condition” as including stereo, monaural, multiplex, number of channels, and bit rate. (Specification, page 5, ll. 9-11; and page 8, ll. 19-20.) Changes in the audio mode or the audio encoding condition can result in cacophonous discontinuities in the audio. The claimed invention compensates for these discontinuities by adjusting the audio output level such that when a change is detected the audio output level is “gradually lowered, and thereafter said audio output level is gradually raised again”

Adjustments to the audio level are made by the recited apparatus. Therefore, these adjustments are fixed in the recording medium generated by the apparatus. The reproduction of a medium that was recorded using the claimed invention will include the modified audio output that the claimed invention produces when a change in audio mode or audio encoding condition is detected regardless of the playback capabilities of the device used to reproduce the medium (i.e., a playback device that does not practice the claimed invention will reproduce the aforementioned audio adjustments if the medium was recorded on a device practicing the claimed invention).

In contrast, Katayama discloses a “recording medium reproduction apparatus for reproducing a recoding medium” that includes an “audio output control means for controlling to fade out an audio output of a first channel and fade in an audio output of a second channel.” (Katayama, col. 1, ll. 65-67 and col. 2, ll. 6-9.) Thus, Katayama merely discloses modifying the audio output signal of a pre-recorded medium, and does not alter the audio output signal fixed on the medium. The invention of claim 1 modifies the data recorded to the medium such that the audio output signal is enhanced regardless of whether the playback device practices the invention disclosed in Katayama or the invention recited by claim 1.

Katayama further fails to anticipate the claimed invention, because Katayama is merely capable of detecting the end of a program chain during video playback and automatically changing

to the next program chain. (Katayama, column 13, lines 7-10.) Katayama does not detect a change in audio mode or audio encoding condition. The term “program chain” is not clearly defined by Katayama, however, a person having ordinary skill in the art would understand a program chain to be a series of one or more individual programs including interstitial gaps between the individual programs. Moreover, Katayama neither discloses, nor suggests, detecting any event other than the end of a program chain during video playback. Thus, Katayama discloses detecting when playback has reached the end of a program chain, which is significantly different than monitoring the “audio mode” and “audio encoding condition” as recited in claim 1. Thus, Katayama does not disclose each and every feature of claim 1. Therefore, Katayama does not anticipate claim 1.

Rejections under 35 U.S.C. § 103

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Katayama in view of U.S. Patent No. 5,621,840 to Kawamura et al. (“Kawamura”).

The Examiner contends that Katayama discloses most of the features of the claimed invention. However, the Examiner relies on Kawamura as disclosing “a digital video recording apparatus with a means for multiplexing a digitally encoded video signal to produce an output video signal and means for multiplexing said output audio signal and said output video signal to produce an output system stream.” (Detailed Action, item 5, page 4.) The Examiner states that the combination of Katayama and Kawamura result in the claimed invention, and that such a combination would have been obvious to a person of ordinary skill in the art at the time of the invention.

Claim 2 depends from claim 1, and recites its own features in addition to those of its base claim. Applicants submit that Kawamura does not disclose or suggest a “means for detecting a change in an audio mode,” demonstrated above to be missing from Katayama with respect to claim 1. Therefore, for at least the same reasons the combination of Katayama and Kawamura neither discloses nor suggests all the features of claim 2. Thus, claim 2 is not obvious over the combination

